

REMARKS

Summary

Claim 1 has been rewritten and Claims 6-12 have been added. Claims 1-12 are pending after entry of this amendment. No new matter has been added as a result of this amendment.

Rejection of Claims

In the Office Action, Claims 1-5 were rejected under 35 U.S.C. §102(b) as being anticipated by the admitted prior art (APA) in view of Matern (U.S. Patent 5,877,033). Applicant respectfully traverses the rejection to the claims as being improper. 35 U.S.C. §102(b) states that "a person shall be entitled to a patent unless the invention was patented ... more than one year prior to the date of the application for patent in the United States." However, this is not true; neither the APA nor Matern alone teach the arrangement of Claim 1 – the Examiner has used a combination of the references to reject the claims.

Assuming that the Examiner meant to reject Claims 1-5 over 35 U.S.C. §103(a), Applicant again traverses such a rejection. Nevertheless, Claim 1 has been rewritten to expedite prosecution of this application.

Claim 1 recites the card connector assembly comprises contact lands that are arranged along an edge of the substrate such that the contact lands are connected to a circuit of an apparatus into which the card connector is inserted. Separate lands, which have a contact area used for testing, are connected to the contact lands through connecting traces. Such an arrangement prevents the contract lands from being damaged by test equipment when testing the card connector, for example, to evaluate the electrical performance of the card connector before it is shipped to a customer.

The Examiner states that Matern, not APA, discloses lands for a test pin. However, Matern does not anticipate an arrangement in which contact lands connected to the lands for the test pin are arranged along an edge of the substrate such that the contact lands are connected to a circuit of an apparatus into which the card connector is inserted. Nothing in Matern teaches that the circuit board of Matern may be inserted

into an additional apparatus, thereby specifically permitting contact between the contact lands and a circuit in the apparatus. Instead, Matern teaches contact lands on the circuit board to which electrical components are connected and lands to which a test pin is connected for testing for the soldering of the electrical components, in which both the contact lands and the testing lands are disposed in the middle of the circuit board.

Nor does Matern suggest such an arrangement. To the contrary, it is only from the teachings of the instant application that contact lands formed at the edge of a card connector may be ascertained. Similarly, it is only from the teachings of the instant application that connection between the contact lands and a circuit of an apparatus into which the card connector is inserted may be discerned. However, Matern must be viewed without the benefit of impermissible hindsight vision afforded by the claimed invention (MPEP 2141.01, p.2100-116). Matern is directed towards a method of detecting defective soldering of electrical components on a circuit board. More specifically, Matern is directed towards detecting unsoldered leads of electrical components on the circuit board. Thus, Matern does not discuss or suggest protecting edge contact lands that are to be connected to circuits on a separate apparatus from being damaged during testing by using separate lands.

Furthermore, even if the references were somehow combined the combined arrangement is still different from the arrangement of Claim 1. The combination provides a set of contact lands on the edge of a circuit board for connecting to a circuit in a separate apparatus and a set of contact lands in the middle of the circuit board attached to lands used for detecting unsoldered leads of electrical components on the circuit board. This is different from the arrangement of Claim 1 in which the only set of contact lands recited are on the edge and are connected to the lands used for testing.

For at least these reasons, neither APA nor Matern, alone or in combination, anticipate or suggest the arrangement of Claim 1. Thus, Claim 1 and Claims 2-5 are patentable over the cited references.

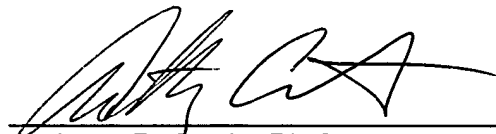
In addition, new Claims 6-12 are patentable over the references cited by the Examiner. Claim 6 recites a method of protecting contact lands arranged along an edge of a substrate of a card connector assembly in which the electrical performance of the card connector is evaluated using contact between at least one of the contact areas of

test lands and a test pin prior to the card connector being inserted into an apparatus containing a circuit and the contact lands making electrical contact with the circuit. None of the cited references, alone or in combination, anticipate and suggest a manner of protecting edge contact lands from damage caused during testing.

Conclusion

In view of the amendments above, Applicant respectfully submits that all of the pending claims are in condition for allowance and seek an allowance thereof. If for any reason the Examiner is unable to allow the application and believes that a telephone interview would be helpful to resolve any remaining issues, he is respectfully requested to contact the undersigned agent or attorney.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'Anthony P. Curtis', is written over a horizontal line.

Anthony P. Curtis, Ph.D.
Registration No. 46,193
Agent for Applicant

BRINKS HOFER GILSON & LIONE
P.O. BOX 10395
CHICAGO, ILLINOIS 60610
(312) 321-4200